



DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON, DC 20361 -0001

IN REPLY REFER TO
NAVAIRINST 4120.6A
AIR-5112
3 May 90

NAVAIR INSTRUCTION 4120.6A

From: Commander, Naval Air Systems Command

Subj: STANDARDIZATION AND COMMONALITY OF SYSTEMS, SUBSYSTEMS, COMPONENTS,
AND EQUIPMENTS

Ref: (a) SECNAVINST 4120.3E
(b) NAVAIR NOTICE 5420 of 14 Apr 86
(c) MIL-STD-680B

1. Purpose. To provide policy and procedures to promote the weapons systems/subsystems commonality and standardization policies of references (a) and (b) in order to ensure that proposed development, acquisition, and logistic support of reparable items reflect maximum practical commonality. The Naval Air Systems Command (NAVAIR) has established management control in the area of commonality throughout the acquisition process in order to maximize utilization of resources while attempting to minimize the life cycle costs and problems that can occur when developing new systems.
2. Cancellation. This instruction supersedes NAVAIR Instruction 4120.6 of 6 December 1972 and AR-71, Master Plan for Standardization of Reparable C/E, of 6 December 1972. Since this is a major revision, changes are not indicated.
3. Scope. The provisions of this instruction apply to all activities of NAVAIR in all phases of development, acquisition, and logistics. It encompasses all weapons systems, subsystems, components, and equipments under the cognizance of NAVAIR.
4. Background. The NAVAIR Commonality Program was established to control the proliferation of systems, subsystems, components, and equipments (C/E's) being introduced into the NAVAIR inventory. The objective of standardizing and reusing items presently in the NAVAIR inventory is to reduce provisioning, procurement, unnecessary development, new data generation, manufacturing, training, and logistic support. This will result in increased supportability while reducing life cycle costs.
5. Policy. It is NAVAIR policy that effective standardization controls will be developed and exercised during all phases of acquisition and logistic support to limit the variety of items used in weapon systems and equipment. This requires
 - a. imposing reference (c) requirements in all NAVAIR acquisition plans for the life cycle of the equipment;
 - b. promoting commonality with inter- and intra-system standardization of systems, subsystems, C/E's;



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- c. considering the reuse, in new design, of items presently existing in the NAVAIR inventory (nondevelopmental items);
- d. ensuring that all contracts contain tailored reference (c) requirements;
- e. precluding use of limited application and poor performance C/E's;
- f. exercising configuration control to maintain commonality and standardization;
- g. increasing use of commercial-style competition, yet emphasizing quality, established performance, and price;
- h. backfitting standardization into existing systems; and
- i. providing visibility to the ongoing standardization effort.

6. Definitions

- a. Components and Equipments (C/E's). Repairable items requiring repair parts support by the naval operating forces, afloat and ashore.
- b. System. Includes all equipment, related facilities, material, software, services, and personnel required for operation and support of an item to the degree that it can be considered a self-sufficient unit in its intended operational environment.

7. Responsibilities

a. Naval Air Systems Command Headquarters (NAVAIRHQ)

(1) System Specification, Standardization and Data Branch (AIR-5112) is designated the NAVAIR Program Coordinator for systems, subsystems, C/E's Standardization and will

(a) assist participating NAVAIRHQ and NAVAIR field activity personnel in the implementation of task assignments; and

(b) act as central point of contact for program managers (PMA's) and contractors for development and implementation of the contractor's standardization program as required by reference (c).

(2) NAVAIR Deputy Commander for Acquisition and Operations (AIR-01) will ensure that system/subsystem commonality and standardization requirements have been incorporated in all phases of material acquisition planning documentation as appropriate.

(3) PMA's will ensure that reference (c) has been invoked early in demonstration and validation phase.

(4) Divisions under Assistant Commander for Systems and Engineering (AIR-05) having material cognizance will

(a) provide for incorporation of C/E's standardization requirements and policy in phases of material acquisition planning documentation as appropriate; and

(b) assist in the development of base line lists of preferred items presently being supported in the NAVAIR inventory.

b. Naval Air Engineering Center (NAVAIRENGCEN), Systems Engineering and Standardization Department will

(1) provide technical support to NAVAIRHQ (AIR-5112);

(2) ensure that reference (c) requirements are cited in system and equipment contracts;

(3) maintain reference (c) for contractual use;

(4) provide technical support for PMA's evaluation of contractors proposed standardization programs submitted under the requirements of reference (c);

(5) act in support of the PMA's in monitoring the contractor's standardization program; and

(6) provide technical requirements, direction, and appropriate funding to the Navy Aviation Supply Office (ASO) for development and maintenance of NAVAIR Design Selection List of Repairable Assemblies (NAVDESL-500).

8. Procedures

a. NAVAIRHQ (AIR-05) divisions, having technical cognizance of C/E's items will:

(1) Initiate standardization procedures associated with the objectives of this instruction, and develop indices to reflect the current degree of standardization in major commodity areas against which to plan and measure future accomplishments such as support equipment, avionics, airframes, accessories, engines, ordnances, etc.

(2) Implement standardization requirements in

(a) program initiation, full scale development, and production and deployment (reference (c) will be mandatory for application to those contracts that require engineering or design and development of systems or equipments);

(b) acquisition of C/E's by use of Defense Acquisition Regulation (DAR) or Federal Acquisition Regulation (FAR) standardization clauses and initiating consolidated buys of standardized C/E's for contractor furnished

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equipment and government furnished equipment. The standardization clauses (FAR), describing technical equipment requiring standardization and interchangeability of parts will be used when determined necessary by the Secretary of the Navy. It will be specified that all C/E's are to be of identical make and model (having identical internal parts) within the block of hardware being acquired under any individual contract; and

(c) acquisition of C/E's by use of multiyear contracting to maintain standardization of form, fit, function, and internal parts for which identical spares and repair parts can be used;

(3) Develop and use, whenever practical, standardized designs for C/E (e.g., valves, pumps, couplings, etc.).

(4) Develop and implement requirements for selecting C/E for new systems from those that are presently supported (operationally and logistically) to the depot level.

(5) Utilize subsystems and C/E's of one weapon system in other systems requiring identical or closely similar design and performance.

(6) Ensure that a minimum variety of C/E's are used in system design.

(7) Incorporate standard C/E's with better performance, reliability, or other indices, wherever significant life cycle cost benefits can be shown to accrue.

b. PMA's will route appropriate acquisition documents for review of standardization and commonality requirements to the Standardization Section (AIR-51122) and the Assistant Director for Commonality/Night Systems (AIR-511B).


9. Action

a. NAVAIRHQ. Divisions under NAVAIRHQ (AIR-05) having material cognizance will provide annually, 1 September, to NAVAIRHQ (AIR-5112), a summary of standardization and commonality actions in design, acquisition, and inventory reductions that implement the policy and procedures described in paragraphs 5 and 7 of this instruction that include multiyear acquisitions and other special acquisition techniques and design selection methods that tend to reduce the proliferation of C/E's and supporting spares and repairable parts. The summary should also include applications of reference (c), MIL-STD-1364, MIL-STD-1378, MIL-HDBK-300 and standardization clauses DAR 3-213 and FAR 15.213.

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b. NAVAIRENGCEN, Systems Engineering and Standardization Department will provide support to NAVAIRHQ (AIR-5112) in the areas of system and subsystem commonality and standardization.

10. Reports. Report Control Symbol DD-P&L(A)758(4120) has been assigned to the reporting requirements in paragraph 9a, and is approved to 29 July 1992.


R. V. JOHNSON
Deputy Commander

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